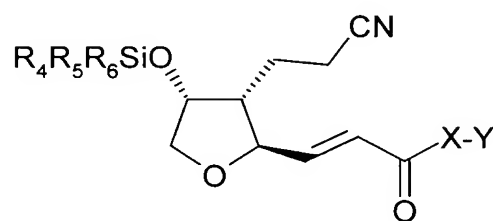


AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

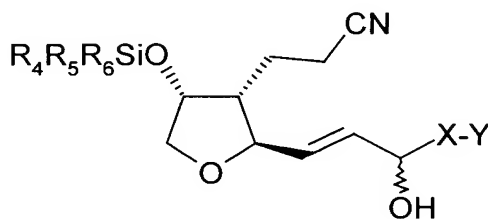
Claims 1-6 (cancelled).

Claim. 7. (New) A method of selectively reducing enone of formula XIV:



XIV

to allylic alcohol of formula XV:



XV

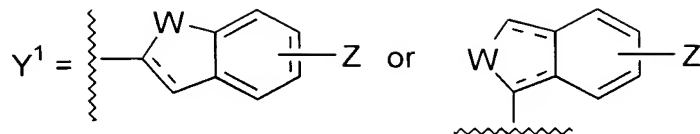
wherein:

R_4, R_5, R_6 = same or different = alkyl, cycloalkyl, or aryl;

$X = (CH_2)_q$ or $(CH_2)_qO$; $q = 1-6$; and

Y = a phenyl ring optionally substituted with alkyl, halo, trihalomethyl, alkoxy, acyl, or a free or functionally modified hydroxy or amino group;

or $X-Y = (CH_2)_m Y^1$, $m = 0-6$,



wherein:

$W = CH_2$, O , $S(O)_m$, NR^{10} , CH_2CH_2 , $CH=CH$, CH_2O , $CH_2S(O)_m$, $CH=N$, or CH_2NR^{10} ;

$m = 0-2$;

$R^{10} = H$, alkyl, acyl;

$Z = H$, alkyl, alkoxy, acyl, acyloxy, halo, trihalomethyl, amino, alkylamino, acylamino, OH ; and

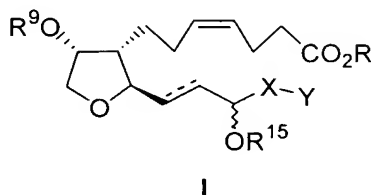
---- = single or double bond;

comprising, contacting said enone with a reducing agent selected from the group consisting of: (-)-*B*-chlorodiisopinocampheylborane and (+)-*B*-chlorodiisopinocampheylborane, in an amount sufficient to effect such reduction.

Claim 8. (New) The method of claim 7, wherein the reducing agent is (-)-*B*-chlorodiisopinocampheylborane.

Claim 9. (New) The method of claim 8, wherein the enone is (2*R* (1*E*), 3*R*, 4*R*)-3-[Tetrahydro-(2-(4-(3-chlorophenoxy)-3-oxo-1-butenyl)-4-(*t*-butyldiphenylsilyl)oxy)-3-furanyl]propanenitrile, and the resulting alcohol is (2*R* (1*E*, 3*R*), 3*R*, 4*R*)-3-[Tetrahydro-(2-(4-(3-chlorophenoxy)-3-hydroxy-1-butenyl)-4-(*t*-butyldiphenylsilyl)oxy)-3-furanyl]propanenitrile.

Claim 10. (New) A process for the preparation of 11-oxa prostaglandin analogs of formula I:



wherein:

R is H or a pharmaceutically acceptable cationic salt moiety, or CO₂R forms a pharmaceutically acceptable ester moiety

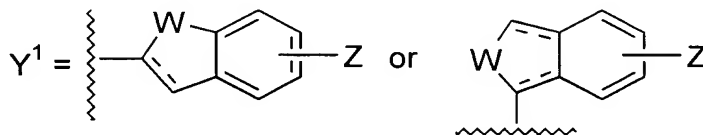
R⁹O and R¹⁵O are the same or different and constitute a free or functionally modified hydroxy group;

--- is a single or *trans* double bond;

X = (CH₂)_q or (CH₂)_qO; q = 1-6; and

Y = a phenyl ring optionally substituted with alkyl, halo, trihalomethyl, alkoxy, acyl, or a free or functionally modified hydroxy or amino group;

or X-Y = (CH₂)_mY¹, m = 0-6,



wherein:

W = CH₂, O, S(O)_m, NR¹⁰, CH₂CH₂, CH=CH, CH₂O, CH₂S(O)_m, CH=N, or CH₂NR¹⁰;

m = 0-2;

R¹⁰ = H, alkyl, acyl;

Z = H, alkyl, alkoxy, acyl, acyloxy, halo, trihalomethyl, amino, alkylamino, acylamino, OH; and

---- = single or double bond;

comprising:

- a) converting 1,4-anhydro-D-glucitol to the corresponding ortho ester;
- b) silylating the ortho ester to yield to the corresponding silyl ether;
- c) removing the ortho ester group of the silyl ether to yield to the corresponding triol;
- d) converting the triol to the corresponding acetonide;
- e) oxidizing the free OH group of the acetonide to yield to the corresponding ketone;
- f) converting the ketone to the corresponding unsaturated ester;
- g) hydrogenating the unsaturated ester to yield the saturated ester;
- h) reducing the saturated ester to yield to the corresponding alcohol;
- i) converting the alcohol to the corresponding sulfonate;
- j) reacting the sulfonate with cyanide to yield to the corresponding nitrile;
- k) oxidatively cleaving the acetonide grouping of the nitrile to yield to the corresponding nitrile aldehyde;
- l) converting the nitrile aldehyde to the corresponding enone;
- m) reducing the enone with a reducing agent selected from (-)-*B*-chlorodiisopinocampheylborane and (+)-*B*-chlorodiisopinocampheylborane, to yield to the corresponding alcohol;
- n) silylating the alcohol to yield to the corresponding bis silyl ether;
- o) reducing the bis silyl ether to yield to the corresponding aldehyde;

- p) condensing the aldehyde to yield to the corresponding ester;
 and
- q) desilylating the ester to yield to the corresponding end
 product.

Claim 11. (New) The method of claim 10, wherein for step (m), the enone is 2R (1E), 3R, 4R)-3-[Tetrahydro-(2-(4-(3-chlorophenoxy)-3-oxo-1-butenyl)-4-(t-butyldiphenylsilyl)oxy)-3-furanyl]propanenitrile and the corresponding alcohol is (2R (1E, 3R), 3R, 4R)-3-[Tetrahydro-(2-(4-(3-chlorophenoxy)-3-hydroxy-1-butenyl)-4-(t-butyldiphenylsilyl)oxy)-3-furanyl]propanenitrile.